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DATA SHEET

Mouse Anti-AChE/Acetylcholinesterase [MD246]: MC0476

Intended Use: For Research Use Only

Description: Acetylcholinesterase (AChE) hydrolyzes the neurotransmitter, acetylcholine at neuromuscular junctions and brain cholinergic synapses, and thus terminates signal transmission. It is also found on the red blood cell membranes, where it constitutes the Yt blood group antigen. AChE exists in multiple molecular forms which possess similar catalytic properties, but differ in their oligomeric assembly and mode of cell attachment to the cell surface. The T form, also known as the asymmetric form, is soluble and is present in synapses. The H form is also known as the globular form and is present on the outer surfaces of cell membranes. The R form is not known to be a functional species. AChE globular form subunits are GPI-anchored to cell membranes and asymmetric subunits are anchored to basal lamina components by a collagen tail. The catalytic sununits of AChE are oligomers composed of disulfide-linked homodimers. The loss of AChE from cholinergic and noncholinergic neurons in the brain is seen in patients with Alzheimer's disease. However, AChE activity is increased around amyloid plaques, which may be due to a disturbance in calcium homeostasis involving the opening of L-type voltage-dependent calcium channels.

Specifications

Clone:	MD246
Source:	Mouse
Isotype:	IgG1
Reactivity:	Human
Immunogen:	Recombinant AChE (Phe377~Thr574) expressed in E.coli
Localization:	Membrane
Formulation:	Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
Storage:	Store at 2°- 8°C
Applications:	IHC, ICC/IF, WB

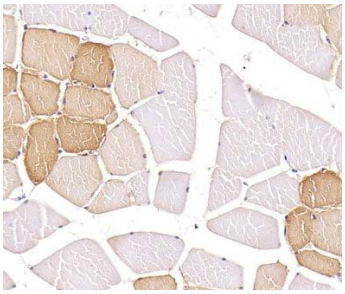
Package:

Description	Catalog No.	Size
AChE/Acetylcholinesterase Concentrated	MC0476	1 ml

IHC Procedure*

Positive Control Tissue:	Skeletal muscle tissues, striatum
Concentrated Dilution:	10-100
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human skeletal muscle tissue stained with anti-AChE using DAB

References:

1. Effect of cannabidiol on muscarinic neurotransmission in the pre-frontal cortex and hippocampus of the poly I:C rat model of schizophrenia. Jimenez Naranjo C, et al. Prog Neuropsychopharmacol Biol Psychiatry 94:109640, 2019.
2. Discovery of novel 2,6-disubstituted pyridazinone derivatives as acetylcholinesterase inhibitors. Weiqiang Xing, et al. Eur J Med Chem. May;63:95-103, 2013.

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